

1 **CLAIMS**

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3 1. A programming interface embodied on one or more computer

4 readable media, comprising:

- 5 a first group of types related to core file system concepts;
- 6 a second group of types related to entities that a human being can contact;
- 7 a third group of types related to documents;
- 8 a fourth group of types common to multiple kinds of media;
- 9 a fifth group of types specific to audio media;
- 10 a sixth group of types specific to video media;
- 11 a seventh group of types specific to image media;
- 12 an eighth group of types specific to electronic mail messages; and
- 13 a ninth group of types related to identifying particular locations.

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15 2. A programming interface as recited in claim 1, further comprising:

16 a tenth group of types related to moving data between file systems.

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18 3. A programming interface as recited in claim 1, further comprising:

19 a tenth group of types related to creating and managing rules for generating

20 notifications.

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22 4. A programming interface as recited in claim 1, further comprising:

23 a tenth group of types describing types defined in all the other groups of

24 types.

25

1 5. A programming interface as recited in claim 1, further comprising:
2 a tenth group of types related to base types that form a foundation to
3 support all the other groups of types.

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5 6. A programming interface as recited in claim 1, further comprising:
6 a tenth group of types common to multiple kinds of messages, including the
7 electronic mail messages; and
8 an eleventh group of types specific to facsimile messages.

9
10 7. A programming interface as recited in claim 1, further comprising:
11 a tenth group of types related to annotations; and
12 an eleventh group of types related to notes;

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14 8. A programming interface as recited in claim 1, further comprising:
15 a tenth group of types related to installed programs; and
16 an eleventh group of types related to installed games.

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18 9. A programming interface as recited in claim 1, further comprising:
19 a tenth group of types related to actions taken by a user; and
20 an eleventh group of types related to maintaining and accessing help
21 information.

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23 10. A programming interface as recited in claim 1, further comprising:
24 a tenth group of types related to a natural language search engine.
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1 **11.** A programming interface as recited in claim 1, further comprising:
2 a tenth group of types related to tasks in a user interface to let a user know
3 what actions the user can perform when navigating the user interface.

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5 **12.** A programming interface as recited in claim 1, further comprising:
6 a tenth group of types related to user tasks.

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8 **13.** A programming interface as recited in claim 1, further comprising:
9 a tenth group of types related to services that can be accessed.

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11 **14.** A programming interface as recited in claim 13, wherein the
12 services can be accessed over a network.

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14 **15.** A programming interface as recited in claim 1, further comprising:
15 a tenth group of types related to identifying access rights.

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17 **16.** A programming interface as recited in claim 1, further comprising:
18 a tenth group of types related to calendar types.

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20 **17.** A programming interface as recited in claim 1, further comprising:
21 a tenth group of types related to creating and managing event monitoring
22 and resultant actions.

1 **18.** A programming interface as recited in claim 1, further comprising:
2 a tenth group of types used for interop for each of the first through ninth
3 groups of types.

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5 **19.** A programming interface as recited in claim 1, further comprising:
6 an additional group of types for each of the first through ninth groups of
7 bytes, wherein each of the additional groups of types are for interop.

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9 **20.** A programming interface as recited in claim 1, further comprising:
10 a tenth group of types related to files stored in a file system.

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12 **21.** A programming interface as recited in claim 1, further comprising:
13 a tenth group of types related to a category hierarchy.

14
15 **22.** A system comprising:
16 means for exposing a first set of functions that represent core concepts of a
17 file system of the system;
18 means for exposing a second set of functions that enable maintaining
19 information regarding entities that can be contacted; and
20 means for exposing a third set of functions that allow document types to be
21 accessed.

22
23 **23.** A system as recited in claim 22, further comprising
24 means for exposing a fourth set of functions related to base types for a
25 plurality of kinds of media;

1 means for exposing a fifth set of functions related specifically to audio
2 media; and

3 means for exposing a sixth set of functions related specifically to video
4 media.

5
6 **24.** A system as recited in claim 23, further comprising:
7 means for exposing a seventh set of functions related specifically to image
8 media.

9
10 **25.** A system as recited in claim 22, further comprising
11 means for exposing a fourth set of functions related specifically to
12 electronic mail messages.

13
14 **26.** A system as recited in claim 22, further comprising
15 means for exposing a fourth set of functions that enable maintaining
16 physical location information.

17
18 **27.** A method of organizing a set of types for a file system into a
19 hierarchical namespace comprising:

20 creating a plurality of groups from the set of types, each group containing at
21 least one type that exposes logically related functionality;

22 assigning a name to each group in the plurality, wherein one of the groups
23 in the plurality includes functionality related to core concepts of the file system,
24 wherein another of the groups in the plurality includes functionality related to
25 entities that a human being can contact, wherein another of the groups in the

1 plurality includes functionality related to document types that can be stored in the
2 file system, and wherein another of the groups in the plurality includes
3 functionality related to multiple kinds of media; and

4 selecting a top level identifier and prefixing the name of each group with
5 the top level identifier so that the types in each group are referenced by a
6 hierarchical name that includes the selected top level identifier prefixed to the
7 name of the group containing the type.

8
9 **28.** A method as recited in claim 27, wherein another of the groups in
10 the plurality includes functionality particularly for audio media, wherein another
11 of the groups in the plurality includes functionality particularly for video media,
12 and wherein another of the groups in the plurality includes functionality
13 particularly for image media.

14
15 **29.** A method as recited in claim 27, wherein another of the groups in
16 the plurality includes functionality related to electronic mail.

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18 **30.** A method as recited in claim 27, wherein another of the groups in
19 the plurality includes functionality related to maintaining physical location
20 information.

21
22 **31.** A method as recited in claim 27, wherein the assigning comprises:
23 assigning a name of Core to the group that includes functionality related to
24 core concepts of the file system so that the hierarchical name for the group that
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1 includes functionality related to core concepts of the file system is
2 System.Storage.Core;

3 assigning a name of Contacts to the group that includes functionality
4 related to entities that a human being can contact so that the hierarchical name for
5 the group that includes functionality related to entities that a human being can
6 contact is System.Storage.Contacts;

7 assigning a name of Documents to the group that includes functionality
8 related to document types that can be stored in the file system so that the
9 hierarchical name for the group that includes functionality related to document
10 types that can be stored in the file system is System.Storage.Documents; and

11 assigning a name of Media to the group that includes functionality related
12 to multiple kinds of media so that the hierarchical name for the group that includes
13 functionality related to multiple kinds of media is System.Storage.Media.

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15 **32.** A method as recited in claim 27, wherein the assigning comprises:

16 assigning a name of Core to the group that includes functionality related to
17 core concepts of the file system so that the hierarchical name for the group that
18 includes functionality related to core concepts of the file system is
19 System.Storage.Core;

20 assigning a name of Contact to the group that includes functionality related
21 to entities that a human being can contact so that the hierarchical name for the
22 group that includes functionality related to entities that a human being can contact
23 is System.Storage.Contact;

24 assigning a name of Document to the group that includes functionality
25 related to document types that can be stored in the file system so that the

1 hierarchical name for the group that includes functionality related to document
2 types that can be stored in the file system is System.Storage.Document; and
3 assigning a name of Media to the group that includes functionality related
4 to multiple kinds of media so that the hierarchical name for the group that includes
5 functionality related to multiple kinds of media is System.Storage.Media.
6

7 **33.** A method, comprising:
8 creating a first namespace with functions that enable identification of
9 particular physical locations; and
10 creating a second namespace with functions that enable identification of
11 entities that can be contacted by a human being.
12

13 **34.** A method as recited in claim 33, further comprising:
14 creating a third namespace with functions that enable documents to be
15 described.
16

17 **35.** A method as recited in claim 33, further comprising:
18 creating a third namespace with functions specific to electronic mail
19 messages.
20

21 **36.** A method as recited in claim 33, further comprising:
22 creating a third namespace with functions common to multiple kinds of
23 media;
24 creating a fourth namespace with functions specific to audio media;
25 creating a fifth namespace with functions specific to video media; and

1 creating a sixth namespace with functions specific to image media.

2
3 **37.** A method as recited in claim 33, further comprising:

4 creating a third namespace with functions that are expected to be used by
5 all other namespaces.

6
7 **38.** One or more computer readable media having stored thereon a
8 plurality of instructions that, when executed by a processor, cause the processor to:

9 create a first namespace with functions that enable identification of
10 particular physical locations; and

11 create a second namespace with functions that are expected to be used by
12 the first namespace and a plurality of additional namespaces.

13
14 **39.** One or more computer readable media as recited in claim 38,
15 wherein the instructions further cause the processor to:

16 create a third namespace with functions that enable documents to be
17 described;

18 create a fourth namespace with functions that enable identification of
19 entities that can be contacted by a human being; and

20 create a fifth namespace with functions common to multiple kinds of
21 media.

22
23 **40.** One or more computer readable media as recited in claim 39,
24 wherein the instructions further cause the processor to:

25 create a sixth namespace with functions specific to audio media;

1 create a seventh namespace with functions specific to video media; and
2 create an eighth namespace with functions specific to image media.
3

4 **41.** One or more computer readable media as recited in claim 38,
5 wherein the instructions further cause the processor to:

6 create a third namespace with functions common to multiple kinds of
7 media;

8 create a fourth namespace with functions specific to audio media;

9 create a fifth namespace with functions specific to video media; and

10 create a sixth namespace with functions specific to image media.
11

12 **42.** A method comprising:

13 calling one or more first functions that enable documents to be described;

14 and

15 calling one or more second functions that are core functions expected to be
16 used by the one or more first functions as well as a plurality of additional
17 functions.
18

19 **43.** A method as recited in claim 42, further comprising:

20 calling one or more third functions common to multiple kinds of media.
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22 **44.** A method as recited in claim 43, further comprising:

23 calling one or more fourth functions specific to audio media;

24 calling one or more fifth functions specific to video media; and

25 calling one or more sixth functions specific to image media.

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2 **45.** A method as recited in claim 42, further comprising:
3 calling one or more third functions that enable identification of entities that
4 can be contacted by a human being; and
5 calling one or more fourth functions that enable identification of particular
6 physical locations.

7
8 **46.** A method as recited in claim 42, further comprising:
9 calling one or more third functions specific to electronic mail messages.

10
11 **47.** A method, comprising:
12 receiving one or more calls to one or more first functions that enable
13 identification of entities that can be contacted by a human being; and
14 receiving one or more calls to one or more second functions that are core
15 functions expected to be used by the one or more first functions as well as a
16 plurality of additional functions.

17
18 **48.** A method as recited in claim 47, further comprising:
19 receiving one or more calls to one or more third functions that enable
20 documents to be described;
21 receiving one or more calls to one or more fourth functions common to
22 multiple kinds of media; and
23 receiving one or more calls to one or more fifth functions that enable
24 identification of particular physical locations.
25

1 **49.** A method as recited in claim 48, further comprising:
2 receiving one or more calls to one or more sixth functions specific to audio
3 media;
4 receiving one or more calls to one or more seventh functions specific to
5 video media; and
6 receiving one or more calls to one or more eighth functions specific to
7 image media.
8 receiving one or more calls to one or more ninth functions specific to
9 electronic mail messages.

10
11 **50.** One or more computer readable media having stored thereon a
12 plurality of instructions that, when executed by a processor, cause the processor to:
13 receive one or more calls to one or more first functions that enable
14 identification of entities that can be contacted by a human being; and
15 receive one or more calls to one or more second functions common to
16 multiple kinds of media.

17
18 **51.** One or more computer readable media as recited in claim 50,
19 wherein the instructions further cause the processor to:
20 receive one or more calls to one or more third functions that are core
21 functions expected to be used by the one or more first functions, the one or more
22 second functions, and a plurality of additional functions.

1 **52.** One or more computer readable media as recited in claim 50,
2 wherein the instructions further cause the processor to:

3 receive one or more calls to one or more third functions that enable
4 identification of particular physical locations;

5 receive one or more calls to one or more fourth functions that enable
6 documents to be described; and

7 receive one or more calls to one or more fifth functions specific to
8 electronic mail messages.

9
10 **53.** One or more computer readable media as recited in claim 50,
11 wherein the instructions further cause the processor to:

12 receive one or more calls to one or more third functions specific to audio
13 media;

14 receive one or more calls to one or more fourth functions specific to video
15 media; and

16 receive one or more calls to one or more fifth functions specific to image
17 media.